Nondestructive Waste Assay Data Validation Expert System Work Flow GJ99 0074

# **Expert System for Validation of CH-TRU NDA Data Packages**

# Problem

The INEEL Transuranic Waste Program needed to accelerate independent technical data review required to certify and ship transuranic waste drums to the Waste Isolation Pilot Plant.

## Baseline Technology

Independent technical reviews conducted by human experts.

#### Innovative Technology

The Expert System is an automated technical review and validation process for data obtained from non-destructive assay of transuranic waste drums.

## Comparison

The computer-based Expert System performs the independent technical review with reduced involvement of human experts.

# Benefits

This system increases data quality, reduces human involvement, accelerates completion of independent reviews required to meet Idaho Settlement Agreement milestones, and is expected to result in an estimated life cycle cost savings of over \$300,000.

# WASTE MANAGEMENT PROGRAM

Project: ID-WM-103 INEEL Transuranic Waste Program

**OST #2233** 

